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Air Brake Hoses Fail Detection with Safety Braking System

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Abstract: Now a day, Machines are widely controlled by electronics system. To meet the need of exploding population economic and effective control of machines is necessary. The main reason is brake failure, it caused to due to poor maintenance as well as product defect, in order to safe guard the valuable human for accident the accident monitoring of brake is very important thing in automobile Vehicle safety is the avoidance of automobile accidents or the minimization of harmful effects of accidents, in particular as pertaining to human life and health. Special safety features have been built into vehicles occupants only, and some for the safety of others. We have pleasure in introducing our new project "Air Brake Hoses Fail Detection with safety Braking System.". This is equipped by sensors and auxiliary braking unit. It is genuine project which is fully equipped and designed for automobile vehicles. The aim is to design and develop a control system based an electronically operated automatic break failure indicator by using pressure sensor. Automatic break failure indicator and auxiliary braking system is consisting of sensor circuit, control unit and frame. The sensor is used to detect the break pneumatic hoses, the control signal to the electronic unit. Similarly, the auxiliary brake fluid line is fixed to the vehicle and this can apply bypass fluid supply to the brake and stop the fluid leakage in vehicle. A pressure transducer sensor monitors the pressure in brake fluid lining. When the primary disc brake fails, the sensor detects the pressure loss and gives signal to the Activates power supply to the secondary braking hoses unit which will further operates the brake. This functions as a secondary braking unit and helps the driver to stop the vehicle and thus ensures safety of the passengers.

Keywords: Brakes, fluid leakage, detection, secondary brakes line, safety

